APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/282,860	03/31/1999	JONATHAN P. BREZIN	YO999-121	9207

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EXAMINER
FLEURANTIN, JEAN B

ART UNIT	PAPER NUMBER
2172	

2172

DATE MAILED: 02/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/282,860	J. P. BREZIN ET AL.
	Examiner	**Art Unit**	
	Jean B. Fleurantin	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _18 December 2001_ .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-41_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-41_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

　　If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____ .

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

　　a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1.   Claims 1-41 are remained for examination.

2.   Applicant's arguments submitted on November 05, 2001 with respect to claims 1 and 40 have been fully considered but are not persuasive.

Response to Applicant' remarks

3.   As per claims 1 and 40, on page 4, Applicant asserted that the Paul patent teachings do not teach or suggest the concept of "relationship information from multiple heterogeneous information sources". However, Examiner disagrees because Paul includes the steps of a system and method for controlling the delivery of unsolicited electronic mail messages over an electronic communications network such as the Internet by identifying the source of identified spam transmissions using spam probes, and automatically alerting network servers and/or user terminals to sources of spam in order to activate an effective filter or "spam wall" program implemented at network servers or user terminals or both; which is readable as relationship information from multiple heterogeneous information sources (see col. 1, lines 52-60).

On page 4, Applicant asserted that the cited teachings of the Paul patent do not or suggest 'relation information nor do they teach or suggest steps of extracting and integrating relationship information'. However, Examiner disagrees because Paul includes the steps of upon receipt of incoming mail addressed to the spam probe addresses the spam control center automatically analyzes the received mail to identify the source of the message, extracts and

processes the source data from the received message and generates an alert signal containing the processed source data the alert signal may also contain filtering instructions used to enable network servers and user terminals to automatically detect spam; which is readable as extracting and integrating relationship information (see cols. 2-3, lines 67-8).

On page 5, Applicant asserted that the asserted that 'it cannot be concluded that the automatic building and storing of relationship data structure from relationship information is automatically extracted and integrated'. However, Examiner disagrees because Paul includes the steps of a system and method for controlling the delivery of unsolicited electronic mail messages over an electronic communications network such as the Internet by identifying the source of identified spam transmissions using spam probes, and automatically alerting network servers and/or user terminals to sources of spam in order to activate an effective filter or spam wall program implemented at network servers or user terminals or both; which is readable as automatically building and storing a relationship data structure to represent the relationship information (see col. 1, lines 52-60). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Paul with the step of automatically building and storing a relationship data structure to represent the relationship information. This modification would allow the teachings of Paul to improve the accuracy and the reliability of the optimization of system performance based on communication relationship.

In response to applicant's argument on pages 6-7, that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any

judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight

reasoning. But so long as it takes into account only knowledge which was within the level of

ordinary skill at the time the claimed invention was made, and does not include knowledge

gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re*

McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Examiner is entitled to give claim limitations their broadest reasonable interpretation in

light of the specification.

Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be 'given the broadest reasonable

interpretation consistent with the specification.' Applicant always has the opportunity to amend

the claims during prosecussion and broad interpretation by the examiner reduces the possibility

that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162

USPQ 541,550-51 (CCPA 1969).

Claim Rejections - 35 U.S.C. § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 1-41 are rejected under 35 U.S. C. 103 (a) as being unpatentable over Paul (US

Pat. No. 6,052,709) ("Paul").

As per claims 1 and 40, Paul substantially teaches a method to optimize information

retrieval based on communication relationships as claimed, comprises the steps of automatically

extracting and integrating relationship information from multiple heterogeneous information

sources (thus, if the data in any of the field of the incoming email message match data stored in

the corresponding data category of the exclusion list manager the email is marked by the filter

with a first display code indicating the junk status of the message, which is readable as

automatically extracting and integrating relationship information from multiple heterogeneous

information sources) (see col. 6, lines 44-50);

automatically modifying a query based on the relationship data structure (thus, filtering

may also be based on the contents in the body of the email, the user exclusion list may

automatically created and maintained and created and modified manually by the user or service

provider; which is readable as automatically modifying a query based on the relationship data

structure) (see col. 6, lines 7-16). But, explicitly Paul does not indicate the step of automatically

building and storing a relationship data structure to represent the relationship information.

However, implicitly Paul indicates the step of the spam control center automatically analyzes the

received mail to identify the source of the message, extracts and processes the source data from

the received message, and generates an alert signal containing the processed source data the alert

signal may also contain filtering instructions used to enable network servers and user terminals to

automatically detect spam, this alert signal is broadcast to all network servers or all user

terminals or both within the communications network a filtering system implemented at the

servers or user terminals automatically receives the alert signal automatically updates stored

filtering data using the source data retrieved from the alert signal and automatically controls

delivery of subsequently-received e-mail messages from the identified spam source; which is

readable as <u>automatically</u> building and storing a relationship data structure to represent the

relationship information. (see col. 2, lines 2-15). Also, in columns 8 and 9, limes 55 through 67

and 1 through 17, Paul teaches the steps of the data in any of these fields of the incoming email

matches data stored in a corresponding field of the inclusion list processor the incoming email is

marked junk and marked with a first display code if no match is detected the email filter labels

the email message as junk by marking the message with a second display, the email filter

interacts with the email message store that processes the email and performs other known

functions for multiplicity of email addresses or accounts, the exclusion list processor may store

an exclusion list for each email address or alternatively an exclusion list for each group of email

addresses organized by domain or other group. Thus, it would have been obvious to a person of

ordinary skill in the art at the time the invention was made to modify the teaching of Paul with

the step of <u>automatically</u> building and storing a relationship data structure to represent the

relationship information. This modification would allow the teachings of Paul to improve the

accuracy and reliability of the optimization of system performance based on communication

relationship, and provide the advantage of reducing the data traffic flow on a communications

link by filtering out junk e-mail before it is stored at the server (col. 9, lines 28-30).

As per claim 2, Paul substantially teaches a method as claimed, wherein said step of modifying a query comprises the steps of prioritizing and filtering the retrieval of related information (thus, receiving email from specific sources or email messages including certain subject matter by adding source data and subject data to the filtering application exclusion lists, which is readable as wherein said step of modifying a query comprises the steps of prioritizing and filtering the retrieval of related information) (see col. 9, lines 50-53).

As per claims 3 and 4, Paul substantially teaches a method as claimed, wherein said step of modifying a query comprises the steps of augmenting information from the heterogeneous information sources (thus, receiving email from specific sources or email messages including certain subject matter by adding source data and subject data to the filtering application exclusion lists, which is readable as the steps of augmenting information from the heterogeneous information sources) (see col. 9, lines 50-53).

As per claim 5, Paul substantially teaches a method as claimed, wherein the heterogeneous information sources are selected from the group consisting of one or more of: people-managed data sources; organization charts; mailing lists; calendar entries; personal address books; priority lists of contacts; and automated system log type information including phone logs and e-mail logs (thus, method and system for controlling delivery of unsolicited electronic mail messages one or more spam probe email addresses are created and planted at various sites on the communications network in order to insure their inclusion on large scale electronic junk mail mailing lists; which is equivalent to wherein the heterogeneous information

sources are selected from the group consisting of one or more of: people-managed data sources; organization charts; mailing lists; calendar entries; personal address books; priority lists of contacts) (see abstract, lines 1-20).

As per claim 6, Paul substantially teaches a method as claimed, further comprises the step of assigning different preferences to the heterogeneous information sources (thus, the filtering system email messages marked with the first display code are further processed by the filter using user preference data entered by the user, which is readable as assigning different preferences to the heterogeneous information sources) (see col. 7, lines 16-33).

As per claim 7, Paul substantially teaches a method as claimed, further comprises the steps of: said step of building a data structure further comprising the step of tracking communication intensities between each pair of communication entities via each information source (thus, the filter application compares the subject data of the received email message with subject preference data entered by the user, which is readable as tracking communication intensities between each pair of communication entities via each information source) (see col. 7, lines 21-36);

integrating the relationship information from the heterogeneous information sources, in response to said tracking step (thus, if a match is detected the email message is marked with a third display code and displayed to the user in a third distinctive mode using known display techniques, which is readable as integrating the relationship information from the heterogeneous information sources, in response to said tracking step) (see col. 7, lines 31-33).

As per claims 8 and 9, Paul substantially teaches a method as claimed, further comprises the step of deriving a relation-group for each communication entity based on a pre-specified criterion on said communication intensities (thus, determine whether the subject data from the received message contain any words or phrases matching the subject information describing each predetermined category, which is equivalent to deriving a relation-group for each communication entity based on a pre-specified criterion on said communication intensities) (see col. 7, lines 41-46).

As per claims 10 and 13-14, Paul substantially teaches a method as claimed, further comprises the step of: computing an aggregate communication intensity from an entity A to an entity B based on a weighted sum of the communication intensities from said entity A to said entity B via each information source (thus, the source data extracted from the alert signals are automatically added to the stored exclusion list, processed by the control center; which is readable as computing an aggregate communication intensity from an entity A to an entity B based on a weighted sum of the communication intensities from said entity A to said entity B via each information source) (see figure 4, col. 6, lines 17-25).

As per claims 11 and 32, Paul substantially teaches a method as claimed, further comprises the steps of: assigning a weight to each information source based on a preference (see col. 6, lines 28-33);

computing the aggregate communication intensity, based on the weight and the preference (thus, the filter application compares the subject data of the received email message

with subject preference data entered by the user, which is readable as computing the aggregate

communication intensity, based on the weight and the preference) (see col. 7, lines 15-33).

As per claim 12, Paul substantially teaches a method as claimed, further comprises the

step of deriving relation-group entities of an entity allowing one or more of an indirect

relationship and an inferred relationship (see col. 4, lines 35-46).

As per claim 15, Paul substantially teaches a method as claimed, further comprises the

step of building and maintaining additional persistent data structures based on the results of the

query to facilitate the response on future queries, based on the relationship data structure (see col.

4, lines 47-67).

As per claim 16, Paul substantially teaches a method as claimed, wherein the additional

persistent data structure can be a personal address/phone book based on the communication

intensity (see col. 4, lines 22-29).

As per claims 17 and 18, Paul substantially teaches a method as claimed, further

comprises the step of determining a significance of a relationship between two entities (thus, the

filtering application receives the alert signal updates stored filtering data upon receipt of the alert

signal using the source data and filtering instructions retrieved from the alert signal, and filters

electronic mail messages addressed to each of the user terminals in accordance with updated

filtering data; which is readable as determining a significance of a relationship between two

entities) (see col. 2, lines 42-47).

As per claims 19-21, Paul substantially teaches a method as claimed, wherein the tracking step can be subject based (see col. 5, lines 10-20).

As per claim 22, Paul substantially teaches a method as claimed, further comprises the step of downloading information based on the significance of the relationship (see col. 3, lines 6-9).

As per claim 23, Paul substantially teaches a method as claimed, further comprises the step of resolving name ambiguity by using the relationship from the heterogeneous information sources to determine one or more of an e-mail address, phone number, and a full name (see col. 4, lines 22-34).

As per claim 24, Paul substantially teaches a method as claimed, further comprises the step of recommending a communication channel based on a recipient characteristic (thus, processor may also extract and analyze data from other fields of the received email message including other header fields, which is readable as recommending a communication channel based on a recipient characteristic) (see col. 5, lines 10-20).

As per claim 25, Paul substantially teaches a method as claimed, further comprises the step of caching a document and information based on the significance of the relationship (thus, the source data extracted from the alert signals are automatically added to the stored exclusion list, which is readable as caching a document and information based on the significance of the relationship) (see col. 6, lines 19-21).

As per claims 26-29, Paul substantially teaches a method as claimed, further comprises the step of detecting inconsistency among data in the heterogeneous information sources (thus, the control center includes a distributor for distributing a probe address to multiple sites on the communications network likely to be accessed by mailers of unsolicited electronic mail, which is readable as detecting inconsistency among data in the heterogeneous information sources) (see col. 2, lines 25-49).

As per claim 30, Paul substantially teaches a method as claimed, further comprises the steps of: integrating the relationship information from the multiple heterogeneous sources using a graph wherein each node represents a communication entity, and a link between a pair of nodes represents the existence of a communication relationship between the two nodes (see figure 1, cols. 3 and 4, lines 59-67 and 1-34).

As per claim 31, Paul substantially teaches a method as claimed, further comprises the step of labeling each link with a communication intensity vector, where each dimension of the communication intensity vector represents a communication intensity from an information source (thus, the processing performed by processor may include analysis of the source header data from the received email message in order to determine the address of the sender or address of the servers relaying the email message from the sender to the spam probe mailbox, and alert signal generator preferably then transmits the alert signal to each server either via an optional dedicated communication link or via communications network; which is readable as labeling each link with

a communication intensity vector, where each dimension of the communication intensity vector

represents a communication intensity from an information source) (see col. 5, lines 10-32).

As per claim 33, Paul substantially teaches a method as claimed, further comprises the

step of obtaining relevant information from the heterogeneous information sources, said

information selected from the group consisting of one or more of: phone numbers; e-mail

addresses: mailing addresses; office location; department; or manager, from various information

sources (thus, method and system for controlling delivery of unsolicited electronic mail messages

one or more spam probe email addresses are created and planted at various sites on the

communications network in order to insure their inclusion on large scale electronic junk mail

mailing lists; which is equivalent to said information selected from the group consisting of one or

more of phone numbers; e-mail addresses: mailing addresses; office location; department; or

manager, from various information sources) (see abstract, lines 1-20).

As per claims 34 and 36, the limitations of claims 34 and 36 are rejected in the analysis of

claims 11 above, and these claims are rejected on that basis.

As per claim 35, Paul substantially teaches a method as claimed, further comprises the

step of calculating a communication intensity based on both a number of communication events

and their temporal characteristics (thus, the filter application compares the subject data of the

received email message with subject preference data entered by the user, notably the subject data

from the received message may include subject header information the full text of the email

message or both; which is readable as calculating a communication intensity based on both a

number of communication events and their temporal characteristics) (see col. 7, lines 23-36).

As per claims 37 and 38, Paul substantially teaches a method as claimed, further

comprises the step of modifying the query to create one or more sub-queries (see col. 8, lines 37-

41).

As per claim 39, Paul substantially teaches a method as claimed, further comprises the

step of excluding results from the sub-queries (thus, once the information contained in the

received email message is identified and received by processor, processor analyzes this

information using processing methods known in the art and extracts the source header data from

the received email message; which is readable as excluding results from the sub-queries) (see col.

5, lines 1-5).

As per claim 41, Paul substantially teaches a method as claimed, further comprises the

step of prioritizing and filtering a list of name to e-mail address mapping to facilitate sending e-

mail (thus, the filtering system controls delivery of unsolicited email messages by discarding the

messages without displaying them to the user the filtering system may also be used to filter email

messages sent from the user terminals, which is readable as prioritizing and filtering a list of

name to e-mail address mapping to facilitate sending e-mail) (see col. 2, lines 17-24).

5.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Breese et al. US Pat. No. 6,006,218 retrieving information as a function of a user's

estimated knowledge.

6.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Conclusion

7.   Any inquiry concerning this communication from examiner should be directed to Jean

Bolte Fleurantin at (703) 308-6718. The examiner can normally be reached on Monday through

Friday from 7:30 A.M. to 6:00 P.M.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's

supervisor, Mrs. KIM VU can be reached at **(703) 305-8449.** The FAX phone numbers for the

Group 2100 Customer Service Center are: *After Final* **(703) 746-7238,** *Official* **(703) 746-7239,**

and *Non-Official (703) 746-7240.* NOTE: Documents transmitted by facsimile will be entered

as official documents on the file wrapper unless clearly marked *"DRAFT".*
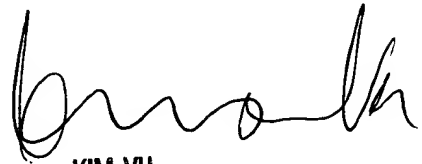
Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group 2100 Customer Service Center receptionist whose telephone

numbers are **(703) 306-5631, (703) 306-5632, (703) 306-5633**.

Jean Bolte Fleurantin

February 10, 2002

JBF/

KIM VU
SUPERVISORY PATENT EXAMINER
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